

IN THE CLAIMS

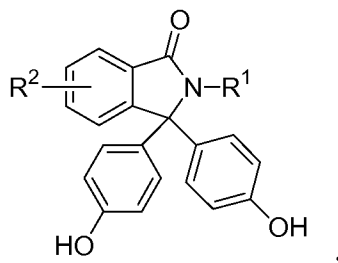
Please amend the claims as follows:

1. (WITHDRAWN) A method for producing a 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine, comprising:

forming a reaction mixture comprising at least one substituted or unsubstituted phenolphthalein, at least one substituted or unsubstituted primary hydrocarbyl amine, and an acid catalyst; and

heating the reaction mixture to a temperature of less than 180 °C to remove a distillate comprising water and form a crude 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine product;

wherein said 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine has a formula:



wherein R¹ is selected from the group consisting of a hydrogen and a hydrocarbyl group, and R² is selected from the group consisting of a hydrogen, a hydrocarbyl group, and a halogen.

2. (WITHDRAWN) The method of Claim 1, wherein said crude PPPBP product is at least 97.5 area percent pure 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine.

3. (WITHDRAWN) The method of Claim 1, wherein said crude PPPBP product is at least 98 area percent pure 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine.

4. (WITHDRAWN) The method of Claim 1, further comprising:

dissolving said crude 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine product in an aqueous base to provide a first solution;

treating and filtering said first solution with a solid adsorbent to provide a second solution;
and

treating said second solution with an aqueous acid to precipitate said 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine.
5. (WITHDRAWN) The method of Claim 4, wherein said treating and filtering is done at least 2 times.
6. (WITHDRAWN) The method of Claim 4, wherein said aqueous base comprises an alkali metal or alkaline earth metal hydroxide, carbonate, or bicarbonate.
7. (WITHDRAWN) The method of Claim 4, wherein said adsorbent comprises an activated carbon.
8. (WITHDDRAWN) The method of Claim 4, wherein said treating and filtering said first solution is effective to reduce an amount of 2-hydrocarbyl-3-{{(4-hydroxyaryl)(2-hydroxyaryl)}}phthalimidine to less than or equal to 1,000 parts per million relative to an overall weight of the 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine.
9. (WITHDRAWN) The method of Claim 1, further comprising contacting said 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine with an aliphatic alcohol to produce a purified 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine comprising less than or equal to 1,000 parts per million of a substituted or an unsubstituted phenolphthalein relative to an overall weight of said purified 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine.
10. (WITHDRAWN) The method of Claim 9, wherein said aliphatic alcohol comprises methanol, ethanol, iso-propanol, iso-butanol, n-butanol, tertiary butanol, n-pentanol, iso-pentanol,

cyclohexanol, ethylene glycol, propylene glycol, neopentyl glycol or mixtures of the foregoing aliphatic alcohols.

11. (WITHDRAWN) The method of Claim 1, wherein said acid catalyst is selected from a group consisting of a substituted or an unsubstituted aliphatic amine hydrochloride, an aromatic amine hydrochloride, or mixtures of the foregoing amine hydrochlorides.

12. (WITHDRAWN) The method of Claim 1, wherein said heating the reaction mixture comprises heating to a temperature of about 150°C to about 175°C.

13. (WITHDRAWN) The method of Claim 1, wherein said heating the reaction mixture comprises heating to a temperature of about 150°C to about 170°C.

14. (WITHDRAWN) The method of Claim 1, wherein said heating the reaction mixture is for a time of about 12 hours to about 20 hours.

15. (WITHDRAWN) A purified 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine prepared in accordance with the method of Claim 1.

16. (WITHDRAWN) The purified 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine of Claim 15, comprising less than or equal to 1,000 parts per million of a 2-hydrocarbyl-3-((4-hydroxyaryl)(2-hydroxyaryl))phthalimidine, relative to an overall weight of said purified 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine.

17. (WITHDRAWN) The method of Claim 1, wherein said 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine is 2-phenyl-3,3-bis(4-hydroxyphenyl)phthalimidine.

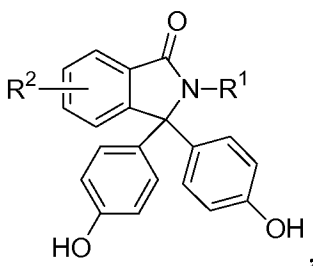
18. (WITHDRAWN) The method of Claim 17, wherein said 2-phenyl-3,3-bis(4-hydroxyphenyl)phthalimidine comprises less than or equal to 1,000 parts per million of a 2-phenyl-3-((4-hydroxyphenyl)(2-hydroxyphenyl))phthalimidine relative to an overall weight of said 2-phenyl-3,3-bis(4-hydroxyphenyl)phthalimidine.

19. (WITHDRAWN) A method for purifying a crude 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine, comprising:

dissolving the crude 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine product in an aqueous base to provide a first solution;

treating said first solution with an activated carbon and filtering to provide a second solution; and

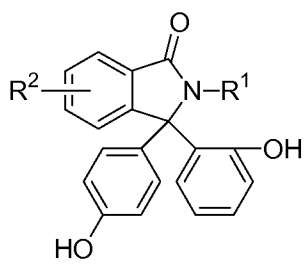
treating said second solution with an aqueous acid to precipitate a purified 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine of formula:



wherein R¹ is selected from the group consisting of a hydrogen and a hydrocarbyl group, and R² is selected from the group consisting of a hydrogen, a hydrocarbyl group, and a halogen, wherein said purified 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine comprises less than or equal to 1,000 parts per million of a 2-hydrocarbyl-3-{(4-hydroxyaryl)(2-hydroxyaryl)}phthalimidine relative to an overall weight of said purified 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine.

20. (WITHDRAWN) The method of Claim 19, wherein said treating said first solution with an activated carbon and filtering to provide a second solution is done at least 2 times.

21. (WITHDRAWN) A 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine comprising less than or equal to 1,000 parts per million of a 2-hydrocarbyl-3-((4-hydroxyaryl)(2-hydroxyaryl))phthalimidine relative to an overall weight of said 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine, wherein said 2-hydrocarbyl-3-((4-hydroxyaryl)(2-hydroxyaryl))phthalimidine has a formula of:



wherein R¹ is selected from the group consisting of a hydrogen and a hydrocarbyl group, and R² is selected from the group consisting of a hydrogen, a hydrocarbyl group, and a halogen.

22. (WITHDRAWN) The 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine of Claim 21, further comprising less than or equal to 1,000 parts per million of a substituted or an unsubstituted phenolphthalein relative to an overall weight of said 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine

23. (WITHDRAWN) A 2-phenyl-3,3-bis(4-hydroxyphenyl)phthalimidine comprising less than or equal to 1,000 parts per million of 2-phenyl-3-((4-hydroxyphenyl)(2-hydroxyphenyl))phthalimidine, relative to an overall weight of said 2-phenyl-3,3-bis(4-hydroxyphenyl)phthalimidine.

24. (WITHDRAWN) The 2-phenyl-3,3-bis(4-hydroxyphenyl)phthalimidine of Claim 23, further comprising less than or equal to about 1000 parts per million of phenolphthalein relative to an overall weight of said 2-phenyl-3,3-bis(4-hydroxyphenyl)phthalimidine.

25 – 27. (CANCELED)

28. (WITHDRAWN) A polymer blend comprising at least one thermoplastic polymer and the polycarbonate of Claim 27.

29. (WITHDRAWN) The polymer blend of Claim 28, wherein said at least one thermoplastic polymer is selected from the group consisting of vinyl polymers, acrylic polymers, polyacrylonitrile, polystyrenes, polyolefins, polyesters, polyurethanes, polyamides, polysulfones, polyimides, polyetherimides, polyphenylene ethers, polyphenylene sulfides, polyether ketones, polyether ether ketones, ABS resins, polyethersulfones, poly(alkenylaromatic) polymers, polybutadiene, polyacetals, polycarbonates, polyphenylene ethers, ethylene-vinyl acetate copolymers, polyvinyl acetate, liquid crystal polymers, ethylene-tetrafluoroethylene copolymer, aromatic polyesters, polyvinyl fluoride, polyvinylidene fluoride, polyvinylidene chloride, tetrafluoroethylene, polycarbonate – polyorganosiloxane block copolymers, copolymers comprising aromatic ester, estercarbonate, and carbonate repeat units mixtures; and blends comprising at least one of the foregoing polymers.

30 - 73. (CANCELED)

74. (CURRENTLY AMENDED) A polycarbonate copolymer comprising structural units of formula derived from a 2-hydrocarbyl-3,3-bis(4-hydroxyaryl)phthalimidine-2-aryl-3,3-bis(4-hydroxyaryl)phthalimidine:

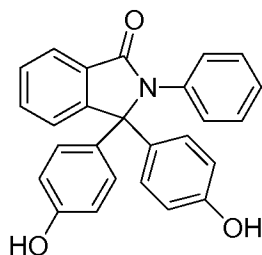


wherein R^1 is selected from the group consisting of a ~~hydrogen and a hydrocarbyl group~~ aryl groups having 6 to 25 carbon atoms; aralkyl groups having 7 to 25 carbon atoms; and cycloalkyl groups, and R^2 is selected from the group consisting of a hydrogen, a hydrocarbyl group, and a halogen, wherein the polycarbonate copolymer has a yellowness index of less than 10 as measured on a 3 millimeter thick plaque in accordance with ASTM D1925.

75. (ORIGINAL) The polycarbonate copolymer of Claim 74, wherein said polycarbonate copolymer has a yellowness index of less than 2 as measured on a 3 millimeter thick plaque in accordance with ASTM D1925.

76. (CANCELED)

77. (NEW) A polycarbonate copolymer comprising structural units derived from



wherein the polycarbonate copolymer has a yellowness index of less than 10 as measured on a 3 millimeter thick plaque in accordance with ASTM D1925.

78. (NEW) The polycarbonate copolymer of Claim 77, wherein the polycarbonate copolymer has a yellowness index of less than 2 as measured on a 3 millimeter thick plaque in accordance with ASTM D1925.

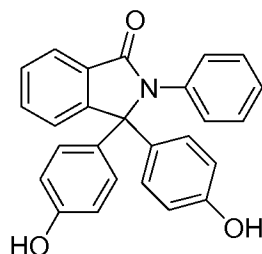
79. (NEW) An article comprising the polycarbonate copolymer of Claim 74.

80. (NEW) The article of Claim 79, comprising a film, a molded article, an automotive headlamp inner lens, an automotive headlamp outer lens, an automotive fog lamp lens, an automotive bezel, a medical device, a display device, an electrical connector, an under the hood automotive part, or a projector lens.

81. (NEW) An article comprising the polycarbonate copolymer of Claim 77.

82. (NEW) The article of Claim 81, comprising a film, a molded article, an automotive headlamp inner lens, an automotive headlamp outer lens, an automotive fog lamp lens, an automotive bezel, a medical device, a display device, an electrical connector, an under the hood automotive part, or a projector lens.

83. (NEW) A lens comprising a polycarbonate, wherein the polycarbonate comprises structural units derived from:



wherein the polycarbonate copolymer has a yellowness index of less than 10 as measured on a 3 millimeter thick plaque in accordance with ASTM D1925.